

WHAT IS CLAIMED:

1. A location service information providing system including at least one requester and at least one requestee, the system providing subscribed information for one of said at least one requester, in response to a subscription service request based on the location of one of said at least one requestee sent from one of said at least one requester,

said system comprising a location service providing device for generating a task relating to the subscription service request, in response to the subscription service request based on the location of said one of said at least one requestee sent from said one of said at least one requester,

said one of said at least one requestee receiving the task from said location service providing device, executing the task, generating the subscribed information responding to the subscription service request, and sending the generated subscribed information to said one of said at least one requester.

2. The location service information providing system according to claim 1,

said location service information providing device comprising:

subscription service request receiving means, for receiving the subscription service request from said one of said at least one requester;

geographical information storage means, for storing the spacial geographical location information within the range where said at least one requestee that can be located;

task application generation module storage means, for storing one or more task application generation modules for generating task applications;

geographical information extracting means, for extracting the spacial geographical information relating to the geographical information specified from the subscription service request, from said geographical information storage means;

task generator, for generating one or more task applications for generating the

subscribed information relative to the geographical location information, according to one or more triggers included in the subscription service request and for triggering the generating the subscribed information relative to the geographical location information, by utilizing the task application generation modules stored in said task application generation module storage means;

said task generator generating a task based on the generated task application(s) and the geographical information extracted by said geographical information extracting means, and transmitting the task to said one of said at least one requestee.

3. The location service information providing system according to claim 2,

said one of said at least one requestee comprising:

task receiving means, for receiving the task from said location service information providing device;

task application storage means, for storing the task application(s) included in the task;

geographical information storage means, for storing the spacial geographical information included in the task;

task executing engine, for controlling, in response to the received task by said task receiving means, the running of the task application(s) stored in said task application storage means to generate the subscribed information;

self-positioning means, for providing the current geographical location information of said one of said at least one requestee for the task application(s);

subscribed information transmitting means, for sending the subscribed information generated by the task application(s) to said one of said at least one requester.

4. The location service information providing system according to claim 3,

said location service information providing device further comprising subscribed information transmitting means for transmitting the subscribed information

received from said one of said at least one requestee to said one of said at least one requester.

5. The location service information providing system according to any one of claims 2 to 4,

the one or more triggers being spacial and/or temporal related conditions relating to the specified geographical location.

6. The location service information providing system according to claim 5,

said task generator further generating a control program for controlling the task application(s) based on the special requirement included in the subscription service request, and transmitting said control program to said one of said at least one requestee.

7. The location service information providing system according to any one of claims 1 to 4,

said one of said at least one requestee being a pervasive device.

8. The location service information providing system according to claim 3,

said self-positioning means being a GPS system.

9. A location service information providing device, for generating a task based on a location of a requestee for a requester, in response to the subscription service request based on the location of the requestee sent from the requester,

said location service information providing device comprising:

subscription service request receiving means, for receiving the subscription service request from said requester;

geographical information storage means, for storing the spacial geographical location information within the range where said requestee is that can be located;

task application generation module storage means, for storing one or more task application generation modules for generating task applications;

geographical information extracting means, for extracting the spacial geographical information relating to the geographical information specified from the subscription service request, from said geographical information storage means;

task generator, for generating one or more task applications for generating the subscribed information relative to the geographical location information, according to one or more triggers included in the subscription service request and for triggering the generating the subscribed information relative to the geographical location information, by utilizing the task application generation modules stored in said task application generation module storage means;

said task generator generating a task based on the generated task application(s) and the geographical information extracted by said geographical information extracting means, and transmitting the task to said requestee.

10. The location service information providing device according to claim 9,

said location service information providing device further comprising subscribed information transmitting means for transmitting the subscribed information received from said requestee to said requester.

11. The location service information providing device according to claim 9 or 10,

the one or more triggers being spacial and/or temporal related conditions relating to the specified geographical location.

12. The location service information providing device according to claim 11,

said task generator further generating a control program for controlling the task application(s) based on the special requirement included in the subscription service request, and transmitting said control program to said requestee.

13. A pervasive device, for providing the subscribed information based on the location of the pervasive device, in response to the subscription service request

based on the location of the pervasive device sent from a requester, comprising,

task receiving means for receiving a task from a location service information providing device;

task application storage means for storing the task application(s) included in the task;

geographical information storage means for storing the spacial geographical information included in the task;

task executing engine for controlling, in response to the received task by said task receiving means, the running of the task application(s) stored in said task application storage means to generate the subscribed information;

self-positioning means for providing the current geographical location information of said pervasive device for the task application(s);

subscribed information transmitting means for sending the subscribed information generated by the task application(s) to said requester,

wherein the spacial geographical information is extracted from spacial geographical information storage means by the location service information providing device, based on the geographical location data specified from the subscription service request;

wherein the task application(s) for generating the subscribed information relative to the geographical location information is generated by said location service information providing device, according to one or more triggers included in the subscription service request and for triggering the generating the subscribed information relative to the geographical location information, and wherein

said task includes said spacial geographical information and the task application(s).

14. The pervasive device according to claim 13,
the task further including a control program for controlling the task application(s)

generated by said location service information providing device, based on the special requirement included in the subscription service request.

15. The pervasive device according to claim 13 or 14,

said self-positioning means is a GPS system.

16. A location service information providing method, for providing subscribed information based on the location of one of at least one request for one of at least one requester, in response to a subscription service request based on the location of one of at least one requestee sent from said one of said at least one requester, comprising the steps:

a location service providing device generating a task relating to the subscription service request, in response to the subscription service request based on the location of said one of said at least one requestee sent from said one of said at least one requester,

said one of said at least one requestee receiving the task from said location service providing device, executing the task, generating the subscribed information responding to the subscription service request, and sending the generated subscribed information to said one of said at least one requester.

17. The location service information providing method according to claim 16, the step of said location service information providing device generating the task further comprising the steps of,

receiving the subscription service request from said one of said at least requester;

extracting the spacial geographical information relating to the specified geographical location, from geographical information storage means storing the spacial geographical location information within the range where said at least one requestee can be located, according to the geographical location data specified from the subscription service request;

generating one or more task applications for generating the subscribed information relative to the geographical location information, according to one or more triggers

included in the subscription service request and for triggering the generating the subscribed information relative to the geographical location information;

generating a task based on the generated task application(s) and the extracted geographical information, and transmitting the task to said one of said at least one requestee.

18. The location service information providing method according to claim 17, said step of said one of said at least one requestee executing the task further comprising the steps:

receiving the task from said location service information providing device;

in response to the received task, controlling the running of the task application(s) to generate the subscribed information;

sending the subscribed information generated by the task application(s) to said one of said at least one requester.

19. The location service information providing method according to claim 17, further comprising the step of:

said location service information providing device transmitting the subscribed information received from said one of said at least one requestee to said one of said at least one requester.

20. The location service information providing method according to claim 17 or 18,

the one or more triggers being spacial and/or temporal related conditions relating to the specified geographical location.

21. The location service information providing method according to claim 20, further comprising the step of:

said location service information providing device further generating a control program for controlling the task application(s) based on the special requirement included in the subscription service request, and transmitting said control program

to said one of said at least one requestee.

22. The location service information providing method according to claim 20, said controlling step responsive to the received task further comprising the steps of:

monitoring the trigger(s);

sending a request for detecting the current geographical location of said one of said at least one requestee, to a self-positioning means, when the trigger(s) is/are on so as to detect the current geographical location of said one of said at least one requestee;

receiving the current geographical location of said one of said at least one requestee detected by said self-positioning means; and

calculating so as to generate the subscribed information based on the current geographical location of said one of said at least one requestee provided by said self-positioning means.

23. The location service information providing method according to any one of claims 16 to 19,

said one of said at least one requestee being a pervasive device.

24. The location service information providing method according to claim 18,

said self-positioning means being a GPS system.

25. A method for generating a task based on a location of a requestee for a requester, in response to the subscription service request based on the location of the requestee sent from the requester, comprising the steps of:

receiving the subscription service request from said requester;

extracting the spacial geographical information relating to the specified geographical location, from geographical information storage means storing the spacial geographical location information within the range where said requestee can

be located, according to the geographical location data specified from the subscription service request;

generating one or more task applications for generating the subscribed information relative to the geographical location information, according to one or more triggers included in the subscription service request and for triggering the generating the subscribed information relative to the geographical location information;

generating a task based on the generated task application(s) and the extracted geographical information, and transmitting the task to said requestee.

26. The method for generating a task according to claim 25, further comprising the step of:

said location service information providing device transmitting the subscribed information received from said requestee to said requester.

27. The method for generating a task according to claim 25,

the one or more triggers being spacial and/or temporal related conditions relating to the specified geographical location.

28. The method for generating a task according to any one of claims 25 to 27, further comprising the step of:

said location service information providing device further generating a control program for controlling the task application(s) based on the special requirement included in the subscription service request, and transmitting said control program to said one of said at least one requestee.

29. A location service information providing method in a pervasive device, for providing the subscribed information based on the location of the pervasive device, in response to the subscription service request based on the location of the pervasive device sent from a requester, comprising the steps of:

receiving a task from a location service information providing device, the task including one or more task application and the special geographical location

information;

performing control, in response to the received task, so as to run the task application(s) to generate the subscribed information;

sending the subscribed information generated by the task application(s) to said requester,

wherein the spacial geographical information being extracted from spacial geographical information storage means by the location service information providing device, based on the geographical location data specified from the subscription service request; and

wherein the one or more task applications for generating the subscribed information relative to the geographical location information is generated by said location service information providing device, according to one or more triggers included in the subscription service request and for triggering the generating the subscribed information relative to the geographical location information.

30. The location service information providing method according to claim 29, said step of controlling responsive to the received task comprising the steps of:

monitoring the trigger(s);

sending a request for detecting the current geographical location of said requestee, to a self-positioning means, when the trigger(s) is/are on so as to detect the current geographical location of said requestee;

receiving the current geographical location of said requestee detected by said self-positioning means;

calculating so as to generate the subscribed information based on the current geographical location of said requestee provided by said self-positioning means.

31. The location service information providing method according to claim 29 or 30, said self-positioning means being a GPS system.